

(ii) The downconversion process must not invert frequencies;

(iii) The nominal gain of the downconverter must be 32 dB, or greater;

(iv) The downconverter must include filtering prior to the first amplifier that attenuates frequencies below 2500 MHz and above 2705 MHz by at least 25 dB;

(v) The downconverter must have an out-of-band input 3rd order intercept point (input IP3) of at least +9 dBm, where out-of-band is defined as all frequencies below 2566 MHz and all frequencies above 2620 MHz;

(vi) The downconverter must have a typical noise figure of no greater than 3.5 dB and a worst case noise figure of no greater than 4.5 dB across all in-band frequencies and across its entire intended operating temperature range;

(vii) The downconverter must not introduce a delta group delay of more than 20 nanoseconds for digital operations or 100 nanoseconds for analog operations over any individual six megahertz MBS channel.

(b) *Migration of Video Programming and Data Transmission Track.* (1) The proponent(s) must provide, at its cost, to each EBS licensee that intends to continue downstream high-power, high-site educational video programming or data transmission services, with one programming track on the MBS channels for each EBS video or data transmission track the licensee is transmitting on a simultaneous basis before the transition.

(i) To be eligible for migration, a program track must contain EBS programming that complies with § 27.1203 (b) and (c).

(ii) The proponent(s) must pay only the costs of migrating programming tracks being transmitted on December 31, 2002 or within six months prior thereto.

(2) The proponent(s) must migrate each eligible programming track to spectrum in the MBS that will be licensed to the affected licensee at the conclusion of the transition.

(3) After the transition, the desired-to-undesired signal level ratio at each of the receive sites securing a replacement downconverter must satisfy the following criteria:

(i) *Cochannel D/U Ratio.* (A) When the post-transition desired signal is transmitted using analog modulation, the actual cochannel D/U ratio measured at the output of the reception antenna must be at least the lesser of 45 dB or the actual pre-transmission D/U ratio less 1.5 dB.

(B) When the post-transition desired signal will be transmitted using digital modulation, the actual cochannel D/U ratio measured at the output of the reception antenna must be at least the lesser of 32 dB or the pre-transition D/U ratio less 1.5 dB.

(C) Where in implementing the Transition Plan, the proponent(s) deploys precise frequency offset in an analog system, the minimum cochannel D/U ratio is reduced to 38 dB, provided that the transmitters have or are upgraded pursuant to the Transition Plan to have the appropriate “plus,” “zero,” or “minus” 10,010 Hertz precision frequency offset with a  $\pm 3$  Hertz (or better) stability.

(ii) *Adjacent Channel D/U Ratio.* The actual adjacent channel D/U must equal or exceed the lesser of 0 dB or the actual pre-transmission D/U ratio. However, in the event that the receive site uses receivers or is upgraded by the proponent(s) as part of the Transition Plan to use receivers that can tolerate negative adjacent channel D/U ratios, the actual adjacent channel D/U ratio at such receive site must equal or exceed -10 dB. Provided that the receive site receiver is not upgraded and cannot tolerate -10 dB, the adjacent channel D/U ratio would be 0dB.

[69 FR 72034, Dec. 10, 2004, as amended at 71 FR 35193, June 19, 2006]

#### **§ 27.1234 Terminating existing operations in transitioned markets.**

Licensees may discontinue operations during the transition.

#### **§ 27.1235 Post-transition notification.**

The proponent(s) must certify to the Commission at the Office of the Secretary, Washington, DC, that the Transition Plan has been fully implemented.

(a) The notification must provide the identification of the licensees that have transitioned to the band plan in

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§ 27.5(i)(2) and the specific frequencies on which each licensee is operating.

(b) For each station in the MBS, the notification must provide the following information:

- (1) The station coordinates,
- (2) The make and model of each antenna,
- (3) The horizontal and vertical pattern of the antenna;
- (4) EIRP of the main lobe;
- (5) Orientation;
- (6) Height of antenna center of radiation;
- (7) Transmitter output power;
- (8) All line and combiner losses.

(c) The proponent(s) must provide copies of the post-transition notice to all parties of the transition.

(d) A BRS or EBS licensee must file any objection to the post-transition notification within 30 days from the date the post-transition notification is placed on Public Notice.

[69 FR 72034, Dec. 10, 2004, as amended at 71 FR 35193, June 19, 2006]

**§ 27.1236 Self-transitions.**

(a) If an Initiation Plan is not filed on or before January 21, 2009 for a BTA, BRS and EBS licensees in that BTA may self-transition by relocating to their default channel locations specified in § 27.5(i)(2) and complying with §§ 27.50(h), 27.53, 27.55 and 27.1221.

(b) To self-transition, a BRS or EBS licensee must:

- (1) Notify the Secretary of the Commission on or before April 21, 2009 that it will self-transition (see paragraph (a) of this section);
- (2) Send a Self-Transition Notification (see paragraph (c) of this section) to other BRS and EBS licensees in the BTA where the self-transitioning licensee's GSA geographic center point is located that it is self-transitioning;
- (3) Notify other licensees whose GSAs overlap with the self-transitioning licensee that it is self-transitioning.
- (4) Address interference concerns with other BRS and EBS licensees in the BTA that are also self-transitioning;
- (5) File a modification application with the Commission, and
- (6) Complete the self-transition on or before October 20, 2010.

(c) *Self-Transition Notification.* The Self-Transition Notification must include the EBS licensee's full name, postal mailing address, contact person, e-mail address, and phone and fax numbers. A self-transitioning EBS licensee must provide the following information to all BRS and EBS licensees located in the BTA where the self-transitioning licensees GSA geographic center point is located:

(1) The location (by street address and by geographic coordinates) of every constructed EBS receive site that, as of the date the Self-Transition Notification is sent, is entitled to a replacement downconverter (see § 27.1233(a)). The response must:

- (i) Specify whether the downconverting antenna is mounted on a structure attached to the building or on a free-standing structure;
- (ii) Specify the approximate height above ground level of the downconverting antenna; and
- (iii) Specify, if known, the adjacent channel D/U ratio that can be tolerated by any receiver(s) at the receive site.

(2) The location (street address and geographic coordinates) of the main station or booster serving each EBS receive site entitled to protection, including:

- (i) The make and model of the antenna for that main station or booster, along with the radiation pattern if it is not included within the Commission's database;
- (ii) The ground elevation, above mean sea level (AMSL), of the building or antenna supporting structure on which the main station or booster transmission antenna is installed;
- (iii) The height above ground level (AGL) of the center of radiation of the transmission antenna;
- (iv) The orientation of the main lobe of the transmission antenna;
- (v) Any mechanical beamtilt or electrical beamtilt not reflected in the radiation pattern provided or included within the Commission's database;
- (vi) The bandwidth of each channel or subchannel, the emission type for each channel or subchannel, and the EIRP measured in the main lobe for each channel or subchannel; and
- (vii) The make and model of the receive antenna installed at that site,